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Analysis of the Effect of Green Banking, Corporate Social Responsibility, Ultimate Ownership on Bank Performance with Good Corporate Governance as a Moderating Variable

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Abstract. The purpose of this study was to determine the relationship between green banking, corporate social responsibility, ultimate ownership of bank performance with good corporate governance as a moderating variable. This research is quantitative research with panel data regression analysis techniques. The data used in this study are 17 commercial banks in Indonesia from 2020-2022. This study proves that the four hypotheses built show a positive and significant relationship. Green banking, corporate social responsibility, ultimate ownership have a positive and significant effect on bank performance. Then good corporate governance is also proven to be an amplifier of the relationship between green banking and bank performance. This study found a relationship between green banking and bank performance through indicators of the ability to earn net profit. This study uses data from 17 banks that have sustainability development reports in the 2020-2022 timeframe. This study also analyzes the role of good corporate governance in moderating the relationship between green banking and bank performance.

Keywords. Green Banking, Good Corporate Governance, Corporate Social Responsibility, Ultimate Ownership, Bank Performance.

1. Introduction

Green Banking whose application is implicitly stated in PBI No.8/21/PBI/2006 and Bank Indonesia circular letter No.8/22/DPbS. In Indonesia, the concept of green banking has received widespread attention in recent years. Green Banking is defined as banking in conducting its business based on the principles of sustainable development. Especially in credit and financing, namely the balance of ecology (environment), human welfare, and social and cultural development of the community. The application of the green banking concept is expanded, from previously only applied in the banking sector, expanded to all financial services institutions.

It is realized that the issue of environmental pollution is inseparable from the role of banks and non-bank financial institutions that finance debtors or invest in environmentally sensitive business sectors. Minister of Environment and Forestry Siti Nurbaya said that in addition to being a solution related to environmental management issues, sustainable financing is also expected to encourage increased competitiveness of national bank and non-bank financial services. Therefore, the sustainability of the banking business is also a cause-and-effect relationship between business behavior and the environment.

As the driving constrain of the country's economy, keeping money within the period of climate alter merits to create an ideal commitment. Keeping money has to adjust interdependently with the environment as a way to win showcase competition whereas protecting the environment. After all, preserving the environment is one of the responsibilities of the financial and banking sector, which is also required to constantly control and manage the environmental impacts resulting from the implementation of its business activities.

Company performance can be improved or decreased through concern for the surrounding environment, one of which is the social environment. Basically, the principles of banking institutions and the environment are very opposite [1]. Banking is a profit-oriented institution while the environment is a system that cannot be assessed from the financial side alone. However, even so, banking performance must still pay attention to environmental issues and be responsible for the environment by conducting Copporate Social Responsibility programs [2].

Through CSR programs, companies are expected to show concern for the environment so as to increase the value of the company, especially in the eyes of investors. Companies are required to use limited energy resources but are expected to maximize productivity, in order to improve the welfare of their shareholders. One of them is by managing Corporate Social Responsibility carried out by the management [3]. CSR is a company's obligation to solve environmental problems caused by company activities [4]. Nowadays, CSR is not a policy that is voluntary for a company in developing responsibility for running a business activity, but has been required for corporations [5].

To carry out a social responsibility, the most basic is to strengthen the continuity of a company and create cooperation with a shareholder in carrying out a program to improve the community in the area [6]. The social responsibility shown by the company is the impact of the emergence of corporate awareness of the importance of protecting the environment around the company, especially matters relating to sustainable development. Concern for the environment will protect future generations against negative impacts that may arise due to company activities. The results of research by [7] and [8] provide an illustration that CSR has a positive influence on the performance of a company. While [9] through his research provides an illustration that CSR programs do not affect the performance of a company.

In public companies, the company's shares are owned by many parties. If share ownership is dispersed, it is difficult for shareholders to control management to make decisions that benefit shareholders. This condition risks causing agency conflicts between shareholders and management. However, if there is one party that has a large enough concentration of ownership that is able to control management, then the agency conflict will shift, which was originally between management and shareholders, to a conflict between controlling shareholders and non-controlling shareholders.

Conflicts between controlling shareholders and non-controlling shareholders occur because controlling shareholders are able to control management to make decisions that benefit themselves, without thinking about whether these decisions can harm other shareholders. The action of controlling shareholders in using their control rights to maximize their own welfare by distributing wealth from other parties is referred to as expropriation of non-controlling shareholders [10]. The concept of ultimate ownership also introduces the separation of cash flow rights and control rights of ultimate shareholders over a company. Through pyramid and cross-ownership mechanisms, an ultimate shareholder can increase control rights beyond his cash flow rights. Based on the Negative Entrenchment Effect argument [10], if a controlling shareholder has control rights that exceed cash flow rights, the controlling shareholder is likely to take expropriation actions. This is because the concentration of control rights that he has will give him the opportunity to make policies that only benefit him, while cash flow rights will only benefit him. his control rights will give him the opportunity to make policies that only benefit him, while lower cash flow rights will reduce the risk of losses from a decrease in the value of the company. The existence of expropriation risk makes investors more careful in making investment decisions. If investors assess the expropriation risk of a public company, it will reduce the company's reputation in the eyes of investors, and also affect the share price. Conversely, if investors assess that there will be no expropriation in the company, they will value the company's shares higher. The implementation of Good Corporate Governance (GCG) is needed for all companies, including companies engaged in banking. Banks must operate healthily in order to maintain public trust. In order for banks to operate healthily, banks must implement the principles of good corporate governance properly. The implementation of good corporate governance in the banking sector is regulated by Bank Indonesia in PBI No.8/14/PBI/2006 concerning the Implementation of Good Corporate Governance for commercial banks. This regulation is carried out so that banks in Indonesia can operate healthily so that they contribute to increasing national economic growth by mobilizing the real sector [11].

A few huge companies in Indonesia are in inconvenience and indeed incapable to proceed their commerce exercises due to terrible corporate administration hones. Cases incorporate: government banks that have been liquidated/merged (Bank Pembangunan Indonesia-Bapindo, Bank Dagang Negara-BDN, Bank Bumi Daya-BBD, Bank Trade Import-Bank Exim); PT Indrayon (a paper process company in North Sumatra); PT Dirgantara Indonesia (an airplane producer headquartered in Bandung); and PT Lapindo Brantas (an oil and gas investigation company in Sidoarjo, East Java). Based on some of the descriptions above, it is important to further analyze the influence of green banking, corporate social responsibility, ultimate ownership and good corporate governance on bank performance.

Based on the background description above, the problem formulation in this study is as follows:

a. How does green banking affect bank performance?
b. How does corporate social responsibility affect bank performance?
c. How does ultimate ownership affect bank performance?
d. How does the role of good corporate governance mediate the effect of green banking on bank performance?

2. Literature Review and Hypothesis Development

2.1. Literature Review

Green Banking

The Indonesian banking world is currently starting to pay attention to environmental issues through various banking activities known as green banking (sustainable banking). A financial institution that is environmentally conscious is known as green banking. [12]. Another opinion presented (Leonard, 2015; Bouma, Jeuken and Klinkers, 2001) green banking means providing banking products or services only to customers, taking into account the environmental and social impact of the bank's activities. [13]. Sustainable financing is a term that describes practices similar to green banking.Sustainable finance is defined as "projects and companies that promote economic prosperity, environmental protection, or social justice" offering products and risk management products [14].

This understanding of green banking is based on the four elements of life, namely:

1) *Nature*
Nature is everything in one environment and is considered a whole [15]. Nature is an element that has the most important substance because if nature and the environment are preserved, the continuity of a business will always be maintained and developed. The element of nature in green banking can be interpreted as a contribution or role that has been done by the banking world through. Policies that aim to preserve nature include the go green policy. Go green is a lifestyle change movement that is free from the use of fossil fuels and other pollutants that harm the environment.

2) *Well-Being*
Welfare is a state of prosperity, security, peace of the community [16]. Welfare is the second element that is very important because if the welfare of the surrounding community increases, the company's business development will run more smoothly so that the reputation and image of a company will be more widely recognized. The steps taken by banks in implementing the welfare element in green banking are by implementing corporate social responsibility policies. Nurdizal et al (2015)

Corporate social responsibility is a component of green banking, which seeks to reduce the detrimental impact of business activities on all stakeholders in the economic, social and environmental domains. This is accomplished through sustainable practices. Explain that this is a serious effort by the company to maximize its positive impact. Several CSR initiatives are implemented, including sustainable development programs, poverty alleviation programs and environmental protection programs. [17].

3) *Economy*
Economics is an effort in making decisions and their implementation related to the allocation of limited community resources (households and businesses / companies) among its various members by considering the ability, effort and desire of each [18]. The economy is a very important element because the economic structure for production, consumption, investment, spending, exports and imports must be designed to be more environmentally friendly in a sustainable manner because if the economy of the surrounding community increases, the company's business development will be smoother because the company's reputation and image are more widely recognized. Steps taken by banks in implementing green banking economic elements, namely companies can carry out environmentally friendly lending policies, which means that banks in providing credit are not only profile-oriented but look at the sustainable development goals implemented by debtors or Sustainable Development Goals (SDGs).

4) *Society*
Society is a group of people who are relatively independent, who live together long enough, who inhabit an independent area, have the same culture and do most of their activities in the group [18]. The community element plays a very important role because the community is the main target that can run the green banking program organized by banks. The thing done by banks related to this element is to change the mindset of the community to do more environmentally friendly things. Banking policies that can be done are by changing the system by using the internet system or e-banking and e-money.

Corporate Social Responsibility (CSR)

Although the core of CSR remains the same, the definition of CSR is still evolving and is a concept that continues to be debated among experts. Johnson and Johnson (2006) define it as: “Corporate social responsibility (CSR) is how a company manages its business processes to have an overall positive impact on society” [19]. This definition derives from the philosophy of how to manage a company, partially or wholly, in a way that has a positive impact on the company and the environment. Businesses must be able to manage their operations by producing products that have a positive impact on society and the environment. The World Business Council for Sustainable Development (WBCSD) is an international organization founded in 1955 with 120 multinational companies from 30 countries. "Making Good Business Sense" defines Corporate Social Responsibility:

> "Continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large."

This definition indicates that companies have corporate social responsibility. It is a form of action that arises from ethical considerations in business and is aimed at improving the economy with an improvement in the quality of life.

Ultimate Ownership

Ultimate ownership can be defined as the portion of direct and indirect ownership of public companies. Direct ownership describes the percentage of shares that a shareholder owns on his/her own behalf. Indirect ownership is the ownership of a public company through a chain of ownership [20]. La Porta et al traced the ownership chains of companies across 27 countries based on voting rights to identify the ultimate owners of these companies [21]. There are five classifications of ultimate owners, namely:

1) Familiy or Individual.
One of the classifications of ultimate owners is individuals or a combination of individuals who have family relationships. Family members are categorized as a single unit of ultimate shareholders with the assumption that they are in coalition in setting company policy.

2) Government
The government is classified as a controlling shareholder because the government can control the company for political purposes and the public as a non-controlling shareholder who risks bearing its losses.

3) Widely Owned Financial Institutions
La Porta et al made a separate classification for widely held financial institutions because a company controlled by widely held financial institutions is less accurately classified as a company with extensive ownership [21]. Although the financial institution does not have a controlling shareholder, the financial institution controls a public company.

4) Widely Owned Company
If the controller of a public company is a company (parent company), the controller of the parent company can be traced. If the parent company does not have a controlling party, or in other words, is a widely-held company, then the parent company is the ultimate shareholder classified as a widely-held company.

5) Other Ultimate Shareholders
According to La Porta et al, other ultimate shareholders are shareholders outside the previous four categories, such as cooperatives, voting trusts, and a group that is not controlled by one controlling investor [21]. An ultimate shareholder can control a company either directly, or indirectly through another company. There are two mechanisms commonly used by ultimate shareholders to control a company through other companies, namely pyramid ownership and cross-holding. Pyramid ownership is the indirect ownership of a company through another company. Meanwhile, a cross-holding structure occurs when a company owns shares of its parent company, or one of the companies in the ownership chain [22]. La Porta et al stated that a company can be called having a pyramid ownership structure if it meets the criteria [21]: (1) it has an ultimate owner and (2) there is at least one company that is not 100% owned between the ultimate owner and the company in the ownership chain. According to Xia (2008), the causes of the pyramid structure can be seen from two different views, namely the opportunistic view and the efficiency view. Based on the opportunistic view, the cause of the pyramid structure is the desire of the ultimate shareholder to do tunneling, which is the behavior of management or ultimate shareholders to transfer the company's assets and profits for their own interests, and harm minority shareholders. Examples of tunneling actions are not distributing dividends, transferring assets at below-market prices, and practicing nepotism. Meanwhile, based on the efficiency view, the pyramid structure is created by ultimate shareholders to reduce external funding difficulties, increase firm value and manage risk. The ultimate shareholder can use all the profits owned by the company to form a business group (pyramid structure). Therefore, when the cost of external funding is expensive, the ultimate shareholder has the desire to form a pyramid structure [23].

Technium Sustainability
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Good Corporate Governance (GCG)

Good corporate governance is a set of rules that govern relationships between shareholders, management, creditors, government, employees, and other internal and external stakeholders with respect to the rights and obligations of each party. In the same context, it can also be interpreted as a system that regulates and controls the company [24]. Good Corporate Governance (GCG) is a set of systems that organize and control the company to create added value for stakeholders [25]. GCG can encourage the formation of a clean, transparent and professional management work pattern so that it can attract investors. The purpose of implementing GCG is to reduce problems that arise as a result of agency problems and provide security to shareholders or investors that their rights are considered and protected. Awareness of GCG practices will encourage corporate transparency and investors will appreciate the value of complete information presented by companies to help them evaluate company performance and prospects.

2.2. Hypothesis Development

Green banking practices are one of the many efforts that banks can make to carry out their social responsibility towards the environment. Even though banks are not directly classified as contributors to environmental pollution, providing loans to their customers can be a factor in polluting the environment [26]. Therefore, banks need to make policies related to assessing the feasibility of businesses for project financing, providing credit or company funding to see the impact of these activities on the environment. When daily banking operations practice green banking, banking activities will be more environmentally friendly. The application of this concept will increase the bank's reputation and positive image in the eyes of investors and the public so that it can increase the number of investors and gain profits. Shaumya & Arulrajah (2017) who examined the influence of green banking practices on the environmental performance of banks in Sri Lanka, found that green banking practices had a positive and significant influence on the environmental performance of banks [27]. This can happen because when a bank applies the green banking concept, it allows the bank to preserve the environment and build the image of banking as a good company. Correspondingly, Uwuigbe et al. (2018) who examined the relationship between sustainability reports and bank performance in Nigeria, found that sustainability reports influenced banking performance [28]. In contrast, Rajput et al. (2013) found that green banking practices had no impact on financial performance [29]. This research, which examines banks in India, explains that green banking practices in India are still at an early stage so they have not yet had an impact on financial performance, a big push and intention from banks is needed to get results. In research by Bessong & Tapang (2012) it was also found that green banking practices had a negative effect on bank profitability in Nigeria [30]. As long as banks carry out social responsibility, banks need to incur costs, thereby reducing income and reducing profits. Research conducted by Bhardwaj and Malhorta (2013) which looked for a relationship between the implementation of green banking and bank performance, showed that there was a positive relationship between the implementation of green banking and bank profitability [31]. In another study, Awino (2014) found that there was a positive relationship from the implementation of green banking to financial performance in commercial banks [32]. The implementation of green banking has an influence on bank performance, especially in the profitability aspect, due to the reduction in paper use in daily banking operational activities. Albertini further explained that there is a positive relationship between environmental performance and bank financial performance [33]. Banking efforts to reduce greenhouse gases tend to increase banking profitability, reducing paper use has a positive relationship to increasing profitability [34].

H1: Green Banking has a positive effect on bank performance

Corporate Social Responsibility (CSR) is a program established by the company to show its responsibility to the environment as a result of its activities. CSR carried out by a company can have an impact on the balance between the company's goals and the norms that apply in the area where the company stands, so that the company is not only oriented towards results, but also pays attention to its impact on the surrounding environment, especially corporate social [35]. Financial performance is a company's ability to generate profit or profit for a company and for an investor. Good financial performance is performance resulting from activities that meet applicable rules, especially in terms of profit and financial gain. Financial performance plays a very important role in maintaining company stability, because through good financial performance, companies can carry out their activities smoothly and optimally. Evaluation of financial performance can be carried out through several stages such as through the profitability ratio owned by a company [36]. The results of research conducted by Pratiwi et al. (2020) provide an illustration that CSR has a positive influence on the profitability of a company. The same thing was conveyed by [35] which provides an illustration that CSR has a positive influence on the performance of a company engaged in the banking sector. Referring to the description above, the hypothesis formulated in this research is as follows:

H2: CSR has a positive effect on bank performance.

Studies linking ultimate ownership and performance include [37], whose results show that in East Asia high cash flow rights are associated with high market value, but high control rights are associated with low market value. La Porta et al. (2002) examined the effect of legal protection of minority shareholders and cash flow rights of controlling shareholders on firm value [21]. Using a sample of 539 large firms from 27 countries, the results show that firm value is higher in countries with better minority shareholder protection and in firms with higher controlling shareholder cash flow rights. La Porta et al. (2002) also stated that strong control rights by controlling shareholders have an unfavorable effect on firm value, while cash flow rights have a positive effect on firm value. The findings of Claessen et al. (2000) and La Porta et al. (2002) is very reasonable because the high control rights will incentivize the ultimate owner to expropriate so that the ultimate owner gets private benefits that must be financed by non ultimate owners. In addition, this expropriation will also reduce the value of the company, because of the transfer of company resources to the ultimate owner.

H3: Ultimate Ownership has a positive effect on bank performance.

The research results show that Good Corporate Governance (GCG) can moderate the significant positive influence of green banking on the financial performance of the banking sector. If the bank's GCG implementation goes well, it can influence the policy of implementing green banking as a strategy in running the company, so that the bank's financial performance can also increase [38]. The board of directors can influence whether or not activities are effective in overseeing company operations. Directors carry out their duties effectively by making appropriate, fast, effective decisions and acting effectively (Julastari & Dewi, 2019). The size of the number of directors will influence the operational success of the company. The higher the quality of the directors' work, the more positive impact it will have on the company's performance. Apart from that, if there are many members of the board of directors, each of their duties will have a good impact on stakeholders. Agency theory explains that the increasing number of board of directors can lead to ineffectiveness in management implementing policies and improving company performance. According to Kusumandari (2016), the commissioner will provide good advice to the directors if the directors commit wrong actions in carrying out their duties [39]. Independent commissioners are members of the board of commissioners who do not have management that affects their ability to act independently [40]. The greater the number of independent commissioners, the greater the company's performance. The existence of independent commissioners can also result in increased supervision of those carrying out their duties so that company performance increases. Agency theory explains that a large number of members of the board of commissioners can make it easier to control management and carry out monitoring functions effectively which will improve company performance. According to Chtourou et al (2001) stated that with an increasing number of boards, the monitoring function of company management will be better [41]. In addition, agency costs will decrease when the company has a large board of commissioners [42]. According to Maryanti &

Technium Sustainability

Technium Sustainability
Vol. 5, pp 75-89 (2024)
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Fithri (2017) and Rouf (2011) stated that the large number of commissioners will affect financial performance [43]. The audit committee is tasked with overall supervision and management of company controls and reporting financial reports consistently. The audit committee also obtained complete results of meeting discussions and the financial reporting was of good quality, thereby improving its financial performance. Apart from that, the audit committee will also create a transparent business environment that can improve and improve company performance. Agency theory explains that the audit committee can protect the interests of shareholders from earnings management actions carried out by management. The existence of an audit committee will ensure that the company's performance achievements will increase. According to Arifani (2013), the existence of an audit committee can supervise management optimally in developing financial performance [44].

H4: Good Corporate Governance (GCG) is able to mediate the influence of green banking on bank performance.

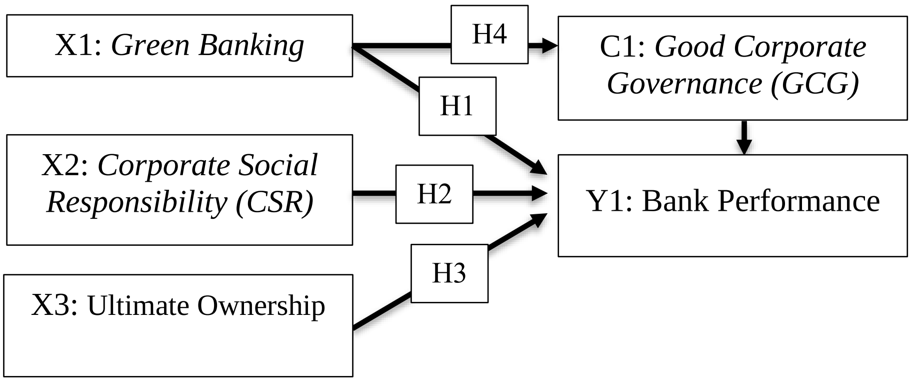

Figure 1 Conceptual Framework

3. Research Methods

This research is a type of research that uses secondary data with a descriptive quantitative approach, to examine the influence of green banking, corporate social responsibility, ultimate ownership and good corporate governance on bank performance. This research data is a type of secondary data obtained from published sources in the form of annual reports of the banking industry which have been listed on the Indonesia Stock Exchange (BEI) for 2020-2022. The data in this research was analyzed using panel data regression analysis techniques. In panel data regression, three tests can be used to select a model or estimation technique to test the regression equation to be estimated, namely the Chow test, Hausman test and Lagrange multiplier test. Before carrying out panel data regression, a descriptive statistical test is carried out, a classic assumption to show the validity of the data used. The classic assumptions used in this research are the normality test, multicollinearity test, heteroscedasticity test and autocorrelation test. The normality test was carried out using the Kolmogorov-Smirnov Test approach. The multicollinearity test was carried out by carrying out the Variance Inflation Factors (VIF) test. The heteroscedasticity test was carried out using the Glejser test. The autocorrelation test was carried out by looking at the Durbin Watson test. This research also tested the hypothesis by looking at the coefficient of determination (R2), simultaneous significance test (F test).

4. Operational Definition of Variables

4.1 Bank Performance

Financial performance is a company's ability to generate profits for a company or for investors. Good financial performance is performance resulting from activities that comply with applicable regulations,

Technium Sustainability
Technium Sustainability
Vol. 5, pp 75-89 (2024)
ISSN: 2810-2991
www.techniumscience.com

especially in terms of earning profits and financial benefits. Financial performance plays a very important role in maintaining company stability, because through good financial performance, the company can carry out its activities smoothly and optimally. Evaluation of financial performance can be carried out through several stages, such as through the profitability ratios of a company [36].
According to [45], company performance is measured using the NIM ratio with the following equation:

$$NIM \frac{net\ interest\ income}{average\ productive\ assets}$$

4.2 Green Banking

Green Banking is banking in all aspects of its business (deposit savings, credit disbursement, leasing operations, mutual funds, etc.) that is oriented towards environmental preservation [46]. Referring to the approach taken in [47], green banking program practices can be revealed in companies by analyzing the following equation:

$$\text{GDB} = \sum_{i=1}^{n} di$$

Information:

GBD	:	Bank i year t Green Banking Disclosure
di	:	1 if reporting, and 0 otherwise
n	:	Number of expected disclosures of Green Banking indicators

4.3 Corporate Social Responsibility

CSR is a program formed by a company to show its responsibility towards the environment as a result of the activities it carries out. CSR carried out by a company can create a balance between the company's goals and the norms that apply in the area where the company is established, so that the company is not only results-oriented, but also pays attention to its impact on the surrounding environment, especially corporate social affairs [35]. Based on theory [45], measuring CSR in companies can be calculated using the following equation:

$$CSRI_j = \frac{\sum X_{ij}}{n_j}$$

Information:

C$SRIj$	:	Corporate Social Responsibility Disclosure Index
Xij	:	Dummy variable; 1 = if 1 item is disclosed, 0 = if 1 item is not disclosed, thus 0 ≤ CSRDI ≤ 1. 1
nj	:	Number of items for company j, nj ≤ 91

4.4 Ultimate Ownership

The structure of banking ownership in Indonesia in this research is divided into 7 ultimate ownership, namely ultimate ownership by: 1) the Indonesian government, 2) regional government, 3) block private institutions, namely the largest percentage of ownership in this category is less than 50% with the ultimate owner being more than from one. 4) concentrated private institutions, namely the largest percentage of ownership is more than 50%. 5) mixed institutions between foreign and domestic, foreign institutions, namely 100% of the shares are owned by foreigners and families. As used by [48], ownership by family is defined as individuals, families or family groups who are related by blood or by marriage. This family relationship is assumed to have one vote as a coalition. Family member information can be seen from the similarity of last names or from other information.

4.5 Good Corporate Governance

The indicator used in this research is managerial ownership which is explained according to Christiawan and Tarigan (2019), managerial ownership is the ownership of company stock by managers; in other words, managers are also shareholders. [49]. Measurement of managerial ownership by Jensen and Meckling [50], namely:

$$\frac{\text{Number of shares owned by management}}{\text{Total company shares outstanding}} x\ 100$$

5. Result and Discussion

5.1 Descriptive Statistics

Table 1 Descriptive Analysis Results

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Green Banking	51	695.00	155458229.00	21301974.9804	41080321.42954
Corporate Social Responsibility	51	130.00	198773.00	35312.7451	57987.46121
Kepemilikan Ultimat	51	24.98	92.48	65.4300	19.04600
Good Corporate Governance	51	1.52	96.68	52.2757	30.69762
Kinerja Bank	51	-5032504.00	51408207.00	7098036.9592	13177611.39583
Valid N (listwise)	51				

Source: SPSS Data Processing Results (2024)

The descriptive test results of the green banking variable obtained a minimum value of 695, while the maximum value was 155458229 and the mean was 21301974.9804. Meanwhile, the Corporate Social Responsibility variable obtained a minimum value of 0, a maximum value of 1, a mean of 0.50. The Ultimate Ownership variable gets a minimum value of 24.98, a maximum value of 92.48 and a mean of 65.4300. Then the good corporate governance variable gets a minimum value of 1.52, a maximum value of 96.68 and a mean of 52.2757. The bank performance variable gets a minimum value of -5032504, a maximum value of 51408207 and a mean of 7098036.9592.

5.2 Classic Assumption Tests

The multicollinearity test is used with the aim of testing whether there is a significant correlation between independent variables. The following are the results of the multicollinearity test in this study:

Table 2 Classic Assumption Test Results

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Sti Tolerance
1	(Constant)	-11.813	1.631		-7.243	.000	
	Green Banking	.095	.043	.223	2.174	.035	.738
	Corporate Social Responsibility	.222	.059	.381	3.793	.000	.767
	Kepemilikan Ultimat	1.848	.405	.480	4.564	.000	.701
	Good Corporate Governance	.507	.130	.368	3.900	.000	.871

a. Dependent Variable: Kinerja Bank

Source: SPSS Data Processing Results (2024)

Technium Sustainability
Vol. 5, pp 75-89 (2024)
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Based on the results of the multicollinearity test in the table above, it can be seen that if the tolerance value is > 0.10 or the VIF value is < 10, then multicollinearity does not occur.

5.3 Hypothesis testing

The following are the results of the analysis of the coefficient of determination (adjusted R2) in this research:

Table 3 Coefficient of Determination Test Results

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.736ª	.541	.511	.95482

a. Predictors: (Constant), Kepemilikan Ultimat, Corporate Social Responsibility, Green Banking

Source: SPSS Data Processing Results (2024)

Based on the above, we find that the coefficient of determination (adjusted R2) = 0.511.This means that the independent variables together influence the dependent variable by 51.1%, and the remaining 48.9% is influenced by other variables not included in the variable research model. The results of hypothesis testing in this study are as follows:

Table 4 Hypothesis and Moderation Test Results

Coefficientsª

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	-8.362	1.572		-5.321	.000
	Green Banking	.108	.050	.256	2.181	.034
	Corporate Social Responsibility	.173	.066	.297	2.637	.011
	Kepemilikan Ultimat	1.499	.453	.389	3.309	.002

a. Dependent Variable: Kinerja Bank

Coefficientsª

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	-1.218	1.216		-1.002	.322
	Green Banking	.061	.073	.144	.831	.411
	Good Corporate Governance	-.383	.243	-.278	-1.578	.122
	GB*GCG	.046	.014	.668	3.174	.003

a. Dependent Variable: Kinerja Bank

Source: SPSS Data Processing Results (2024)

The first hypothesis, based on a partial regression test, the initial hypothese was established with an estimated value of 2,181 for each t-count and 0.108, and probability (p) = 0.034. In case the probability value (p) is less than 0, data processing results are presented. Hypothesis 1 is accepted.

The second hypothesis if thet value in the partial regression test was 2,637, then the coefficient of regression (beta) would be 0.173, and the probability (p) = 0.011. In case the probability value (p) is less than 0, data processing results are presented.Hypothesis 2 is accepted.

The third hypothesis Based on the partial regression test, the t-count value was 3.309, the regression coefficient (beta) was 1.499, and probability (p) = 0.002. In case the probability value (p) is less than 0, data processing results are presented. Hypothesis 3 is accepted.

The fourth hypothesis, Based on the partial regression test, we obtained a t-value of 3.174, a regression coefficient (beta) of 0.046, and a significance (p) = 0.003. Based on the data processing results with significance value (p) ≤ 0.05, it can be concluded that green banking is moderated by good corporate governance and has a positive and significant impact on bank performance. Good corporate governance can align green banking with bank performance. Hypothesis 4 is accepted.

Based on the results of hypothesis testing and moderation analysis in this research, it can be concluded that all the hypotheses made were accepted and none were rejected.

6. Conclusions, Implications and Limitation

6.1 Conclusions

First, there is the relationship between green banking and bank performance. Based on the partial regression test, we obtained a T-count value of 2.181, a regression coefficient (beta) of 0.108, and a probability (p) = 0.034.This means that a 1 unit change in the green bank variable causes a 0.108 unit change in the bank performance variable. Based on the data processing results with probability value (p) ≤ 0.05, it can be concluded that green banking has a positive and significant impact on bank performance. The results of this study are consistent with the findings of Karyani and Obrien (2020).Ratnasari, Sruwanti and Privadi, (2021). Enjen, (2023) explains that the implementation of green banking concepts has a positive and significant impact on banks' financial results and performance.

The second is the relationship between corporate social responsibility and bank performance. Based on the partial regression test, the t-count value is 2.637, the regression coefficient (beta) is 0.173, and probability (p) = 0.011. This means that a one unit change in the variable "Corporate Social Responsibility" has an impact of 0.173 on bank performance. Based on the data processing results with probability value (p) ≤ 0.05, it can be concluded that corporate social responsibility has a positive and significant impact on bank performance.The results of this study are in line with research conducted by Putranto and Kewal (2014); Darmawati, (2015); Muslikhin et al., (2020), which shows that Corporate Social Responsibility has a positive and significant effect on bank performance. The results of this study are consistent with the study of Putranto and Kewal (2014). Dharmawati, (2015); Muslihin et al. (2020) show that corporate social responsibility has a positive and significant impact on bank performance.

Third, the relationship between ultimate ownership and bank performance. Based on the partial regression test, the t-count value is 3.309, the regression coefficient (beta) is 1.499, and probability (p) = 0.002. This means that a 1 unit change in the final ownership variable has a 1.499 impact on bank performance. Based on the data processing results with probability value (p) ≤ 0.05, it can be concluded that ultimate ownership has a positive and significant impact on bank performance. The results of this study are consistent with the study by Surifah (2011;) Ritha (2020), which shows that the final ownership structure has a positive and significant impact on bank performance.

Fourth, the relationship between green banking and bank performance moderated by good corporate governance. Based on the partial regression test, the t-count value is 3.174, the regression coefficient (beta) is 0.046, and the significance (p) = 0.003. Based on the data processing results with significance value (p) ≤ 0.05, it can be concluded that green banking is moderated by good corporate governance and has a positive and significant impact on bank performance. Good corporate governance can align green banking with bank performance.These results are in line with research conducted by (Nirmalasari, 2022) which shows that there is a positive and significant effect of green banking policies on bank performance, which is moderated by Good Corporate Governance.

6.2 Implication

6.2.1 Theoretical Implications

It is hoped that this research can complement the study of scientific literature, especially in the field of accounting and more specifically on policies for implementing green banking in the banking industry.

6.2.2 Managerial Implications

It is hoped that this research can be used as consideration for practitioners in making policies related to the application of the green banking concept, especially in the banking industry.

6.3 Limitations

This research is limited to only looking at the relationship between green banking and bank performance, which is represented by indicators of the ability to earn net profits. Meanwhile, in the context of banking performance, there are still many indicators that can be analyzed further to obtain comprehensive analysis results. Future researchers should be able to expand the scope of research by adding variables or developing indicators, especially those related to the concept of green banking on bank performance.

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